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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/340,463	06/28/1999	YUNATOSHI OHTA	35.G2420	3937

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

TRAN, DOUGLAS Q

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 07/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/340,463

Applicant(s)

OHTA, TAKATOSHI

Examiner

Douglas Q. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohta et al. (US Patent No. 5,621,542).

As to claim 1, Ohta teaches:

Input means for inputting image data (col. 2, line 67);

Processing means for quantizing error correction data obtained by adding error data to the image data input by the input means (col. 3, lines 1-4, the error data is distributed to image data) so that data having at least two levels are generated (col. 3, lines 5-7, the data of two levels 0 and 1 is generated by the distributed means); and

Allocating means (i.e., an error distribution table) for allocating the error data generated when the quantization is performed to image data which are not quantized (col. 5, lines 7-10 and 13-14 and col. 3, lines 59-61; the error data from the error distribution table is distributed to peripheral pixels around a target pixel, so target pixel is quantized and peripheral pixels are not quantized);

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Wherein in response to a predetermined level of the error correction data, the processing means outputs, as a result of quantization, a different level from a level resulting from fundamental processing for the predetermined level so as to prevent a pseudocontour form being generated (col. 5, lines 36-46, a predetermined level of the error correction data that is the value of the denominator of the error distribution coefficient is equal to 256 which is processed by multiplying to the input image data of 8 bits. Therefore, the result from the processing would be a level different from the level resulting from fundamental processing for the predetermined level. Col. 6, lines 16-18, from the above processing, the pseudocontour form is prevented because the picture quality in the highlighted portion of the image can be improved).

As to claim 2, Ohta teaches that the allocation means allocates (i.e., an error distribution table), as the error data, the difference between the error correction data and the quantized data having a different level from a level resulting from fundamental processing (col. 5, lines 51-59).

As to claim 3, Ohta teaches that an output means for outputting, based on the data having at least two levels from the processing means, an image in which the sizes of dots are controlled (col. 6, lines 10-15 and col. 4, lines 54-56).

As to claim 4, Ohta teaches that the output means uses ink jet printing to record an image (col. 4, line 54-55).

As to claims 5-8, Ohta teaches the methods are performed by apparatus claims 1-4 as indicated above.

As to claim 9, due to the similarity of this claim to that of claim 1, this claim is rejected as the reason applied to claim 1.

Response to Arguments

Applicant's arguments filed 5/08/03 have been fully considered but they are not persuasive.

Applicant asserted in page 4 "Nor does anything in Ohta appear to be directed specifically to prevention of pseudo-contours, much less actually teach that a pseudo-contour can be avoided by using a particular type of processing" In reply, Ohta teaches, col. 5, lines 36-46, a predetermined level of the error correction data that is the value of the denominator of the error distribution coefficient is equal to 256 which is processed by multiplying to the input image data of 8 bits. Therefore, the result from the processing would be a level different from the level resulting from fundamental processing for the predetermined level. Col. 6, lines 16-18, from the above processing, the pseudocontour form is prevent because the picture quality in the highlighted portion of the image can be improved.

Applicant asserted in page 5 "nothing in Ohta is believed to teach or suggest that this fundamental, or normal, processing should be departed from when the error data has a specified level". In reply, Ohta teaches processing means for quantizing error correction data obtained by adding error data to the image data input by the input means (col. 3, lines 1- 4, the error data is distributed to image data) so that data having at least two levels are generated (col. 3, lines 5-7, the data of two levels 0 and 1 is generated by the distributed means); and allocating means (i.e.,

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an error distribution table) for allocating the error data generated when the quantization is performed to image data which are not quantized (col. 5, lines 7-10 and 13-14 and col. 3, lines 59-61; the error data from the error distribution table is distributed to peripheral pixels around a target pixel, so target pixel is quantized and peripheral pixels are not quantized).

Therefore, Ohta teaches the fundamental, or normal, processing should be departed from when the error data has a specified level.

For the above reasons, it is believed that the cited prior art fully discloses the claimed invention and the rejection stand.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

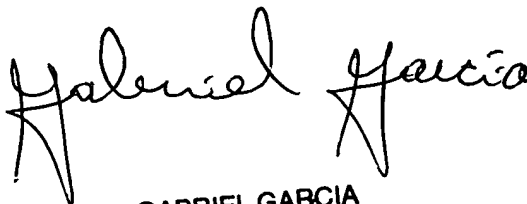
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
Jul. 10, 2003

A handwritten signature in cursive script that reads "Gabriel Garcia". The signature is written in black ink and is positioned above the printed name and title.

GABRIEL GARCIA
PRIMARY EXAMINER